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ADOPTING THE FINDINGS AND RECOMMENDATIONS EXPRESSED IN COUNCIL COMMUNICATION 245 (2020) AND REQUESTING THE MAYOR OF THE CITY AND COUNTY OF HONOLULU TO INITIATE AN EXPEDITED ENVIRONMENTAL REVIEW OF THE ENGINEERING PROPOSALS FROM THE UNITED STATES ARMY CORPS OF ENGINEERS AND OCEANIT LABORATORIES FOR THE ALA WAI FLOOD RISK MITIGATION PROJECT.

WHEREAS in December 2017 the United States Army Corps of Engineers, Honolulu District ("USACE"), released its Feasibility Study with Integrated Environmental Impact Statement ("Feasibility Study") for the Ala Wai Flood Risk Mitigation Project ("Project"); and

WHEREAS, the Feasibility Study proposed a flood mitigation scheme that consisted of eleven structural and two-nonstructural features and included water detention and debris retention basins in the Makiki, Manoa, and Palolo, sub watersheds, flood walls in the lower Ala Wai Watershed, and pumping to manage flood waters; and

WHEREAS, the proposed water detention basins were meant to slow down storm discharges to reduce flood intensity downstream, including in Waikiki, and the debris retention basins were intended to eliminate large debris from blocking stream restrictions such as bridges downstream that could force the storm water to overflow stream banks and flood public, residential, and business areas; and

WHEREAS, from late 2018 through early 2020, USACE updated its Hydrologic Engineering Center's River Analysis System ("HEC-RAS") hydrologic and hydraulic models that were used in preparing its Feasibility Study, and based on new data derived from the updated modeling system, determined that a 100-year storm event would lead to more extensive inundation across the base of the watershed, and that the anticipated flood water reductions from the Feasibility Study would not be realized; and

WHEREAS, in light of the results from the new modeling data, USACE proceeded to develop new technical solutions to address the model changes and investigate modifications to system features necessary for the system to perform as anticipated, and documented their proposed changes and recommendations in an Engineering Documentation Report ("EDR"); and

WHEREAS, on August 17, 2020, USACE released its EDR documenting changes to its authorized system of features in its 2017 Feasibility Study; which includes the following major changes:



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- The Ala Wai Floodwall cross section is more robust to include deep sheet pile for seepage and piles for stability, and it is taller and located farther from the canal, which under the initial design conflicted with roadways, curb and gutters, lighting, traffic signs, and trees;
- 2. The Ala Wai Floodwall length is reduced by approximately 4,000 linear feet on the southern alignment from the eastern terminus at the Waikiki-Kapahulu Library to the confluence of the Manoa-Palolo Channel and Ala Wai Canal;
- 3. The number of pump plants is reduced by one; however, the pumping capacity is greatly increased from 1337 cfs/pump plant to 4000 cfs, and the pump plant now straddles the Ala Wai Canal, where before it was located on land;
- 4. The length of the Ala Wai Golf Course levee is reduced based on the new location, cutting the golf course almost in half, a weir option has been included, and the sediment basin is eliminated;
- 5. A floodwall is added along the Manoa-Palolo Channel extending from the Ala Wai Canal northward to Date Street;
- 6. A flood control structure is added along the Makiki Stream, and the Hausten Ditch flood control structure is relocated farther upstream;
- 7. A stream diversion structure is added to divert the Makiki Stream to a different entry point into the Ala Wai Canal;
- 8. Floodwalls are added to the Manoa Stream upstream of Woodlawn Bridge;
- 9. Channel deepening is added downstream of the Woodlawn Bridge;
- 10. The Manoa Stream in-stream catchment basin is deleted;
- 11. Six upper watershed detention basins are identified for elimination and their funds reallocated: Makiki Debris/Detention Basin (D/DB), Waihi D/DB, Waiakeakua D/DB, Woodlawn Ditch DB, Waiomao D/DB, and Pukele D/DB:

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- 12. A berm along the southern side of Manoa Valley District Park is added; and
- 13. Mitigation measures at Falls 7/8, and the associated adaptive management are eliminated; and

WHEREAS, with the release of the EDR, the USACE will be developing final recommendations related to modifications of project features with full consideration that the modifications are technically sound, economically justified, and environmentally and socially acceptable through the completion of a Validation Study; and

WHEREAS, because the recommendations in the EDR did not go through the required National Environmental Policy Act ("NEPA") analysis, such as analyses under Endangered Species Act, National Historic Preservation Act, and Clean Water Act, nor has agency coordination been initiated for the recommendations, the Validation Study will include the development of a supplemental NEPA document; and

WHEREAS, USACE plans to submit a public notice for a Supplemental NEPA and begin scoping meetings for the Supplemental NEPA in October 2020; and

WHEREAS, although the Mayor submitted an acceptance on July 13, 2020, of the Final Environmental Impact Statement ("FEIS") that was transmitted to the City on June 30, 2020, the FEIS does not appear to contain the proposed changes to the Project that were documented in the EDR that was released subsequent to the FEIS on August 17, 2020, for which USACE is planning to undertake Supplemental NEPA meetings and review in the course of the Validation Study; and

WHEREAS, the Council established and authorized a Permitted Interaction Group by Resolution 19-50, adopted on March 8, 2019, composed of Councilmembers Ann Kobayashi, Carol Fukunaga, and Michael Formby to investigate issues and concerns relating to the Project, and by Resolution 19-108, adopted on May 7, 2019, the Council substituted the then newly elected Councilmember Tommy Waters for interim Councilmember Michael Formby; and

WHEREAS, in August 2019, the Council hired Oceanit Laboratories ("Oceanit") as engineering consultants to help address community concerns and technical issues, develop alternative engineering analyses and technical solutions in response to concerns raised by Ala Wai Watershed stakeholders and other interested parties, and assist the Permitted Interaction Group in preparing its report to the Council; and



WHEREAS, on August 27, 2020, the Permitted Interaction Group presented its report to the Council in accordance with Resolution 19-50, as amended by Resolution 19-108, via Council Communication 245 (2020) ("CC-245 (2020)") ("Report"); and

WHEREAS, in addressing community concerns raised over the flood mitigation scheme proposed in the 2017 Feasibility Study, Oceanit developed, based on community input and in collaboration with USACE, the Subsurface Watershed Inundation Flow Technology ("SWIFT") design concept that utilizes tunnels to remove water from the upper watersheds, bypass the lower watershed and the Ala Wai Canal, and discharge flood water directly into the ocean; which is a design recommendation in the Permitted Interaction Group's Report; and

WHEREAS, in modeling the conceptual design of SWIFT, Oceanit determined that the tunnels would conceivably remove a significant amount of water from the upper watershed during 50- and 100-year events directly to the ocean, reducing the effects of flooding in the lower watersheds and preventing overtopping of the Ala Wai Canal, and would complement USACE's HEC-RAS updated models based on the new features and designs documented in the EDR; and

WHEREAS, Oceanit presented the SWIFT concept to USACE, and while agreeing with the concept and its potential benefits, USACE raised concerns relating to the economics of the concept, contending that the cost of SWIFT could not fit into its economic model (based on current available appropriations) without securing additional non-federal funding, and accordingly, SWIFT was not considered in the modified EDR Project; and

WHEREAS, the Council seeks to expedite consideration of a combination of the best engineering solutions developed by USACE in its updated EDR recommendations and Oceanit's SWIFT tunnel design, and possibly other community-based alternatives, to address flood risk mitigation in the *mauka* and *makai* regions of the Ala Wai Watershed; and



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WHEREAS, in light of the significant changes to the Project documented in the EDR and the ensuing Supplemental NEPA proceedings planned by USACE, an expedited environmental review of the full range of engineering solutions for the Project is warranted, and such review may also help identify shared City, State and federal financing mechanisms to implement the Project, taking into account the State's interests in ecosystem restoration, the City's responsibility for storm water drainage solutions, and USACE's role in constructing flood mitigation projects throughout the United States; now, therefore.

BE IT RESOLVED by the Council of the City and County of Honolulu that the Mayor is requested to initiate an expedited environmental impact statement review process that evaluates Oceanit Laboratories' Subsurface Watershed Inundation Flow Technology tunnel design, the United States Army Corps of Engineers proposal as modified by recommendations in the Engineering Documentation Report, and other community-based recommendations in combination, to produce a comprehensive, effective, and cost-effective flood risk mitigation project; and

BE IT FURTHER RESOLVED that the Council hereby adopts the findings and recommendations of the Permitted Interaction Group's Report, submitted on August 27, 2020, via CC-245 (2020) as the Council's position on the Ala Wai Flood Risk Mitigation Project, and strongly urges the implementation of the engineering and design recommendations outlined in the Report; and



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BE IT FINALLY RESOLVED that copies of this resolution be transmitted to the Mayor, the Managing Director, Governor, the United States Army Corps of Engineers, Honolulu District, and Oceanit Laboratories.

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DATE OF INTRODUCTION:	
SEP 3 2020	
Honolulu Hawaii	Councilmembers

#### CITY COUNCIL CITY AND COUNTY OF HONOLULU HONOLULU, HAWAII CERTIFICATE

**RESOLUTION 20-230** 

Introduced:

09/03/20

By:

ANN KOBAYASHI CAROL FUKUNAGA **TOMMY WATERS** 

Committee:

COUNCIL

Title:

RESOLUTION ADOPTING THE FINDINGS AND RECOMMENDATIONS EXPRESSED IN COUNCIL COMMUNICATION 245 (2020) AND REQUESTING THE MAYOR OF THE CITY AND COUNTY OF HONOLULU TO INITIATE AN EXPEDITED ENVIRONMENTAL REVIEW OF THE ENGINEERING PROPOSALS FROM THE UNITED STATES ARMY CORPS OF ENGINEERS AND OCEANIT LABORATORIES FOR THE ALA WAI FLOOD RISK MITIGATION PROJECT.

Voting Legend: \* = Aye w/Reservations

09/09/20

COUNCIL

RESOLUTION 20-230 WAS ADOPTED.

9 AYES: ANDERSON, ELEFANTE, FUKUNAGA, KOBAYASHI, MANAHAN, MENOR,

PINE, TSUNEYOSHI, WATERS.

I hereby certify that the above is a true record of action by the Council of the City and County of Honolula on this RESOLUTION.

ASHI, CITY CLERK

IKAIKA ANDERSON, CHAIR AND PRESIDING OFFICER